

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

THOMAS LAUMANN, FERNANDA GARBER,
ROBERT SILVER, GARRETT TRAUB, DAVID
DILLON and PETER HERMAN, representing
themselves and all other similarly situated,

Plaintiffs

v.

NATIONAL HOCKEY LEAGUE, *et al.*

Defendants

CA No. 12-1817 (SAS)
ECF Case

FERNANDA GARBER, MARC LERNER,
DEREK RASMUSSEN, ROBERT SILVER,
GARRETT TRAUB, and PETER HERMAN,
representing themselves and all other similarly
situated,

Plaintiffs

v.

OFFICE OF THE COMMISSIONER OF
BASEBALL, *et al.*

Defendants

CA No. 12-3704 (SAS)
ECF Case
REDACTED

DECLARATION OF ROGER G. NOLL¹

QUALIFICATIONS

My name is Roger G. Noll, and I reside in Palo Alto, California. I am Professor *Emeritus* of Economics at Stanford University and a Senior Fellow at the Stanford Institute for Economic

¹ This declaration is subject to the Protective Orders entered in these cases and contains references to materials labeled highly confidential and specially protected.

Policy Research, where I am the Director of the Program on Regulatory Policy. I have a Ph.D. in economics from Harvard University and a B.S. in mathematics from the California Institute of Technology. My primary field in economics is industrial organization, which includes antitrust economics and the economics of specific industries, such as sports and broadcasting. I have taught antitrust economics to both undergraduate and graduate students for 50 years.

I have published over 300 books, articles and reviews, many of which deal with professional sports, broadcasting, and/or antitrust. Among these are two books on the economics of sports, *Government and the Sports Business* (editor and author of three chapters) and *Sports, Jobs and Taxes* (co-editor and co-author of three chapters). My co-authored book, *Economic Aspects of Television Regulation*, received an award from the National Association of Educational Broadcasters as the best book of the year in communications policy. I also have been awarded distinguished career awards by the AEI/Brooking Joint Center on Regulation, the Public Utility Research Center at the University of Florida, and the Transportation and Public Utilities Group of the American Economic Association. My complete *curriculum vita* is attached to this declaration as Appendix A.

I have been an economic expert in the following cases that are in process or came to conclusion during the past five years.

Testimony at Trial

Bernard Parish, et al., vs. National Football League Players Association (U. S. District Court, San Francisco);

In re Application of MobiTV Related to U.S. vs. ASCAP (U.S. District Court, New York City);

economists at Navigant Consulting and Precision Economics, and by Professor Ali Yurukoglu of Stanford University. For my work on this matter I am compensated at the rate of \$800 per hour.

SUMMARY AND CONCLUSIONS

This declaration undertakes an analysis of the competitive effects of the television broadcasting policies of MLB and the NHL. I implement both approaches that economists use – the “direct effects” method and the “traditional” method – and conclude from both that the restrictions that the defendants have agreed to adopt with respect to the sale of live television rights and the geographic distribution of these rights has caused anticompetitive harm to consumers. This harm consists of causing the prices that consumers pay for access to live game telecasts to be higher than otherwise would be the case if the restrictions were not in place, and for consumers to have less choice among the live game telecasts that are available to them.

In undertaking my analysis, I have reached the following additional conclusions. First, each major league professional sport operates in its own relevant product market: games in one sport are not close competitive substitutes for games in another sport. Furthermore, the geographic markets in which teams sell their products are localized. For television rights, league rules confine the geographic market in which a team can sell and its RSN can distribute live game telecasts to the set of local television markets (called designated market areas, or DMAs) in which the team has home territorial broadcast rights. These localized markets are artificially created by league rules and the defendants’ agreements and would be integrated into a national market if these restrictions were removed, leading me to conclude that these groups of home territory DMAs are properly categorized as submarkets.

I also conclude that the teams and the leagues enjoy substantial market power in selling television rights. The Lerner Index for the prices that the teams and the leagues charge for their television products is extremely high, and the submarkets in which these rights are sold are highly concentrated in the presence of high barriers to entry. Moreover, a principal potential competitor for live game telecasts of a team is the national package of games that are offered by the league, but the nature and terms for these packages are the product of collusive decisions by the teams in the league and are set so as to minimize the extent to which the league packages compete with local telecasts.

The principal cause of substantial market power by the teams and the leagues in the sale of television rights is the agreement among teams not to compete in the sale of local television rights, as implemented by territorial exclusive home television rights, including restrictions on the delivery of Internet streaming of live telecasts by RSNs.

The anticompetitive effects of these restrictions are less choice and higher prices for consumers. Many RSNs that carry live telecasts of games in a team's home broadcast territory are carried outside this territory, but with the live telecasts blacked out. In the absence of the territorial restrictions, RSNs could include these games in their out-of-market telecasts at almost no cost, and likewise could offer Internet streams of games at very little incremental cost.

To calculate the effects of the restrictions on prices, economists working under my direction have estimated an econometric model of the prices that would emerge in a market in which each league continued to offer its bundled package of out-of-market broadcasts, but each RSN also was permitted to offer the live telecasts of the team or teams in the league for which it holds local television rights. The model was estimated using subscriber data from 2012 for the Internet versions of the league packages that were offered by MLB and the NHL. The results of

this analysis are that competition between the leagues and the RSNs would drive down the price of the league packages by more than 50 percent.

I also have analyzed the business justifications for the territorial broadcast rights that were asserted in the *MLB Responses* and the *NHL Responses* to plaintiffs' interrogatories. I have concluded that none of these justifications is valid because none offers plausible benefits to consumers that offset a more than doubling of the price of the league packages of out-of-market games. Specifically, I conclude the following. First, neither MLB nor the NHL is a single entity with respect to the sale of television rights because teams do not have integrated and common business interests and, within the framework of territorial restrictions, in several local television markets teams still compete in the sale of television rights. Second, the provision of exclusive rights does not produce efficiencies. The alleged efficiencies asserted by the defendants apply only to the sale of exclusive rights by a team, and not to the exclusion of other teams from a market. Third, territorial restrictions are unnecessary for the leagues to continue to offer various nationally distributed television products, and in fact the existence of these products is not challenged in this litigation. Fourth, the creation of territorial rights does not contribute to competitive balance, but in fact makes competitive balance worse due to the disparities in the value of home broadcast territories and the methods of the leagues in redistributing shared revenues. Finally, the claim that territorial rights contribute to "franchise stability" is not about providing a benefit to consumers, but about providing a benefit to teams at the expense of consumers by denying consumers the opportunity to switch their allegiances among teams.

The remainder of this report explains the basis for these conclusions.

proved to have existed; there is no allowable defense.”¹² *Per se* anticompetitive conduct includes “all agreements among competing firms to fix prices, to restrict or pool output, or otherwise directly to restrict the force of competition.”¹³

In this litigation plaintiffs allege that the defendants engaged in activities that normally are regarded as *per se* anticompetitive conduct: the teams in each league the entities that televise their live games have divided the television markets in the nation and have agreed not to compete in live television broadcasts of games outside of the local television markets that have been allocated to each of them. The teams in each league also have agreed to offer an exclusive package of out-of-market games in each of these local markets at a price that is determined by the league, which is jointly owned and controlled by the member teams. Exclusive home broadcast territories are a classic example of a division of the market because they protect a team and its RSN from competition from teams and their RSNs that have other home broadcast territories. This division of the market harms consumers by reducing the intensity of price competition and the variety of live game telecasts in every local television market. Moreover, because the league package is a competitive substitute for the live televised games of a team in its home broadcast area and is the only option for obtaining live games of out-of-market teams, the involvement of all teams in setting prices for the package is price fixing among horizontal competitors.

The division of television markets into exclusive home broadcast territories has no purpose and would be unnecessary if it did not have anticompetitive effects. If live telecasts of

¹² W. Kip Viscusi, Joseph E. Harrington, Jr., and John M. Vernon, *Economics of Regulation and Antitrust*, 4th Edition, MIT Press, 2005, pp. 135.

¹³ F. M. Scherer and David Ross, *Industrial Market Structure and Economic Performance*, 3rd Edition, Houghton Mifflin, 1990, p. 317.

games of out-of-market teams were not competitive substitutes for live telecasts of games involving an in-market team, all RSNs and MVPDs would be sacrificing audiences, subscription fees and advertising revenue, and all teams would be sacrificing revenues from rights fees, by agreeing to honor the assignment of home broadcast rights. Thus, as a matter of antitrust economics, the agreement that each team and its RSN will not compete outside its home market must have anticompetitive effects or this policy would make no economic or business sense.

Economic Analysis of Liability under the Rule of Reason

In antitrust economics an analysis of liability under the rule of reason seeks to assess the overall effect of alleged anticompetitive conduct on economic performance in the market in which the conduct occurred and in related markets. To ascertain whether alleged anticompetitive conduct harmed the competitive process under the rule of reason requires addressing two fundamental issues.

The first issue is whether the conduct in question caused anticompetitive harm by reducing competition. Conduct by sellers harms competition if it injures buyers by causing prices to be higher, output to be lower, and/or product quality and variety to be less than otherwise would have been the case.

The second issue is whether conduct that caused anticompetitive harm has a reasonable business justification. Conduct has a business justification if it is reasonably necessary to achieve an improvement in market performance that exceeds the harm to competition. The benefits to entities that engage in anticompetitive conduct are not relevant to establishing a reasonable business justification. Just as antitrust policy protects competition rather than competitors, anticompetitive conduct has a business justification only if it improves market performance

Teams in the Same Sport

A team owns or leases its playing facility and uses its control over access to the facility as a means for selling tickets to games and other products in the stadium. Control of access to the stadium also enables a team to sell the right to televise its home games. A team obtains the right to televise its away games by entering into agreements with other teams whereby each grants the other the right to televise away games in the stadium of the home team. This procedure enables each team to sell an entire season of home and away games to a broadcaster. For example, the Office of the Commissioner of Baseball reported that in 2011 teams in MLB televised, on average, 151 of their 162 regular-season games.⁵⁷

The most plausible close competitive substitutes for telecasts of the games of a major league team are telecasts of other teams in the same league. Although a few teams face competition from another team in the same league that is located in the same metropolitan areas, most teams do not. Hence, for most teams the closest plausible competitive substitute for telecasts of its games are telecasts of games of teams that are located in other metropolitan areas.

Because economics research concludes that teams in the same league in the same metropolitan area are competitive substitutes, the same is likely to be true for competition for television rights. The value of rights to telecast games are derived from the value of sports telecasts to broadcasters, which in turn is derived from the revenue that a broadcaster can generate from televising the games of a team. The revenue to the broadcaster comes from two sources: advertising and the fees charged to MVPDs for the right to carry the channel. Advertising revenues depend on the size and composition of the audience, and fees depend on the value of the channel to the MVPDs in attracting subscribers to the system.

⁵⁷ Federal Communications Commission, *In the Matter of Sports Blackout Rules: Notice of Proposed Rulemaking*, MB Docket No. 12-3, December 18, 2013, p. 13.

The revenues from broadcasting are similar to the revenues from attendance: ticket prices are like channel carriage fees, and in-stadium advertising and promotion is like advertising on television. Thus, competition in ticket sales and the sale of television rights is driven by the same fundamental phenomena – the interest of sports fans in various sports and their willingness to switch among teams. If teams in the same sport in the same metropolitan area are competitors for attendance, they also are likely to be competitors for television rights since both sources of revenue depend on the behavior of local sports fans.

One research study tested this proposition by examining the demand for both attendance and viewing locally televised NBA games. This study found that the attendance and audience regressions produced similar results, and that both were significantly reduced by the presence of another NBA team in the same area.⁵⁸

The next issue in defining the relevant market is whether telecasts of games of teams with home facilities in other local television markets are competitive substitutes for a local team. Unlike the market for attendance at games, distance from the stadium does not create a cost advantage for a local team compared to a team from another television market. Hence, if consumers are interested in an entire sport or multiple teams, and if a substantial number of fans of a team do not live in its home television market, telecasts of games involving two out-of-market teams can be a competitive substitute for a telecast of a game involving a local team.

Consumers who follow a particular team are not confined to that team's home television market. An analysis of purchases of team apparel from Fanatics, the on-line merchandiser of team apparel for MLB and the NHL, found that 63 percent of purchasers of MLB team products and 54 percent of purchasers of NHL team products were "displaced" customers in that the

⁵⁸ Mongeon and Winfree, *op. cit.*

apparel that they purchased was for a team that was located in another state.⁵⁹ For MLB, approximately half of the fans of a particular team do not live in that team's home television market.⁶⁰ For the NHL, on average 49 percent of the registered users of NHL.com in 2010 were fans of an out-of-market team.⁶¹ The fraction of an NHL team's fans that are from within the team's home market varies from 31.4 percent for Detroit to 68.2 percent for Minnesota. At the time these data were assembled, Detroit was the most popular NHL team, accounting for 5.5 percent of all fans,⁶² but even within the Detroit market the Red Wings were not the favorite team of 29.2 percent of all hockey fans.⁶³

Except for Alaska, states with no home team are assigned to the home broadcast territory of an NHL team in another state. For example, Indianapolis is assigned to the home television markets of Chicago and St. Louis. Among Indiana hockey fans, 25.4 percent are fans of the Blackhawks, 3.4 percent are fans of the Blues, and 71.2 percent are fans of out-of-market teams. These results imply that, were it allowed, telecasts of teams at least as popular as the Blues would be offered in Indiana and would be competitive substitutes for the teams that now claim Indiana as home territory.

The distribution of fans among teams in two large, multi-team states – California and New York – shows that even with four in-state teams, many consumers are fans of other teams. The assignments of California DMAs are divided between San Jose in the north and Anaheim

⁵⁹ Irving Fain, "Displaced Fans Remain Connected – and Valuable – to Teams," *Sports Business Journal*, Feb. 4-10, 2013, at <http://www.sportsbusinessdaily.com/Journal/Issues/2013/02/04/Opinion/From-the-Field-of-Fan-Engagement.aspx>.

⁶⁰ *Deposition of Robert Bowman*, November 6, 2013, p. 157.

⁶¹ See Bates No. NHL1496456, slide 23. A fan is defined as either having stated that the team is a favorite or having purchased merchandise bearing the team's logo.

⁶² Calculated from NHL Fan Data Base for the 2009-10 season, Bates No. NHL2845470.

⁶³ See Bates Nos. NHL2270833-67 at 63.

to sites that essentially duplicate MVPDs plus offer additional video content. Hulu offers a streaming Internet service that includes programming from hundreds of networks.⁸³

Programs from the major networks typically are delayed before being released to Internet television, and most cable sports networks are not available over the Internet because sports leagues and broadcasters either prevent Internet streaming or require that the customer also subscribe to a package that is offered through an MVPD. Consequently, Internet television generally is not yet a close substitute for an MVPD for access to most televised sports. But this is not the case for the out-of-market packages that are sold by MLB and the NHL. MLB.tv and NHL GameCenter Live are available through two Internet television services that use set-top boxes to broadcast through TV sets, Apple and Roku.⁸⁴ Several other devices, including video game players, can be used to connect broadband services to television sets for the purpose of viewing streaming video over the Internet.⁸⁵ Hence, a consumer can acquire the packages of out-of-market games that are offered by MLB and the NHL via either distribution system. Thus, Internet distribution of the out-of-market packages is a competitive substitute for games in the same sport that are carried on MVPDs.⁸⁶

The growing substitutability of Internet television for MVPDs during the class period is demonstrated by the trends in subscriptions to MLB.tv and MLB Extra Innings. Between 2008 and 2012, the number of subscribers to MLB Extra Innings [REDACTED]

⁸³ See the lineup of Hulu networks at <http://www.hulu.com/tv/networks>.

⁸⁴ Amadou Diallo, "Ready to Cut the Cable TV Cord? Here's How to Do It," *Forbes*, October 16, 2013, at . <http://www.forbes.com/sites/amadoudiallo/2013/10/16/how-to-cut-the-cord-cable-tv/>

⁸⁵ FCC, *15th Report, op. cit.*, pp. 182-83.

⁸⁶ MLB also reached the conclusion that Internet streaming of live games competes directly with cable and satellite distribution, Bates Nos. MLB0367317.

[REDACTED]⁸⁷ Early in this period DirecTV and Comcast raised the [REDACTED]
[REDACTED]⁸⁸ Meanwhile, the
number of subscribers to MLB.tv [REDACTED]⁸⁹

These data show that technological convergence has caused Internet distribution of telecasts to become a competitive substitute for conventional telecasts of over-the-air stations and cable channels. Thus, I conclude that Internet distribution of games in a major league sport is now in the same relevant market as television distribution of major league games in the same sport.

Notwithstanding convergence of television and Internet streaming as distribution channels for game telecasts, league rules that prevent teams and RSNs from streaming games over the Internet inhibit the integration of DMAs into a single national market. Thus, rules and policies that effectively prevent streaming by individual clubs or RSNs and that allocate DMAs among teams, combined with the fact that only telecasts of major league games in the same sport are competitive substitutes for a telecast of games involving a specific team, cause a group of DMAs for which the same teams have home television rights to be a relevant submarket.⁹⁰

⁸⁷ Bates No. MLB0007161.

⁸⁸ Bates No. MLB0007162.

⁸⁹ Bates No. MLB0017972.

⁹⁰ For clarity, the Miami and West Palm Beach DMAs are in a submarket of telecasts of MLB games that includes the Marlins, but not the Devil Rays. The Tampa and Sarasota DMAs are in a submarket of telecasts of MLB games that includes the Devil Rays, but not the Marlins. The remaining DMAs in Florida plus the Mobile, Alabama, DMA are in a submarket that includes both teams. The other products that are in these submarkets are MLB Extra Innings and MLB.tv, but not telecasts by RSNs of any other MLB team. As a practical matter, the extent of competition in all DMAs in a submarket is the same, so an analysis of competition in one DMA applies to other DMAs in the same submarket.

The Role of Leagues

The structure of leagues and the scope of services that they provide are relevant to understanding the extent of competition in major league baseball and hockey in North America. While the structures and functions of the four major league team sports leagues in the U.S. (baseball, basketball, football and hockey) are similar, other league structures and functions also exist, and the structure and authority of a league has implications for the extent of competition among teams, including competition in the sale of television rights.

Two activities that are performed by MLB, the NHL and other North American major leagues are especially relevant to the allegations in the *Complaints*. The first activity is to determine the membership of the league and to assign home territories to each team for playing games and selling rights for live broadcasts, as discussed elsewhere. The second activity is to engage in business activities on behalf of all of the teams in the league.

Leagues as Standards Organizations

In addition to the participating teams, an important input to the production of a game in major league sports is a form of standardization service that is performed by a league. A league establishes rules of play and eligibility, employs officials to enforce the rules, creates schedules of games that lead to a championship, determines which teams participate in the league, and, in some cases, specifies where teams can play their home games.⁹¹ The essence of the “product” of a league is to organize sporting competition that leads to one team being declared the league champion. Without leagues, teams would organize a series of unrelated matches, as was the case

⁹¹ See Noll, “The Organization of Sports Leagues,” *op. cit.*, Szymanski, “The Economic Design of Sporting Contests,” *op. cit.*

in the early history of baseball and still is the case with “barnstorming” teams that stage a series of exhibitions, such as the Harlem Globetrotters.

The standardization function of a league adds value to a schedule that teams on their own might arrange from a series of bilateral agreements because consumers apparently prefer a standardized product (all games are played under the same rules) and the additional consequentiality of a game that arises from creating a balanced schedule of games that leads to a championship. Standardization can be accomplished either by mutual agreement among a group of teams or by each of a group of teams hiring an outside entity to perform this function for the group.

From an economic standpoint, the only plausible factors that would limit the geographic scope of the market for league standardization services are the underlying interest in a sport in each local area and the teams’ travel costs of playing out a schedule in a league with a larger geographic footprint. The former factor plausibly explains why the NFL does not have teams around the world,⁹² but it does not explain why the geographic scope of MLB, the NHL and the NBA is limited to North America. The contrast between these sports and soccer is especially interesting. As discussed in detail later in this section, international governing bodies in soccer organize international competitions among the top professional teams that are structured as a form of league. No such competitions exist that involve teams in MLB or the NHL, even though professional leagues in these sports enjoy popularity among consumers in other nations. Based on the soccer example, there does not appear to be a natural economic limit to the geographic scope of a league, notwithstanding the fact that North American major league teams do not participate in international leagues.

⁹² The NFL did attempt to create a satellite league in Europe – the World League of American Football – but this attempt did not obtain enough consumer support to succeed.

Leagues as Economic Agents of Member Teams

Leagues often perform other economic functions for their teams. Sometimes leagues stage contests (that is, manage a sporting event – an example is the Super Bowl in the NFL), sell product licenses for teams in a league, and centralize the sale of broadcasting rights. The last is especially important in understanding the nature of competition in the relevant telecasting markets that are alleged in this case.

All major professional leagues in North America sell rights to televise games at a specific time of the week during the regular season and the league playoffs to national networks that, in turn, distribute these telecasts over local over-the-air televisions stations and/or MVPD channels. All major North American professional sports leagues also aggregate and sell packages of out-of-market games that are televised by local over-the-air stations and RSNs in the home broadcast territories of the teams in the game. A full understanding of the nature of competition in providing these products requires taking into account the role of leagues in the supply of both games and telecasts of games.

Teams in all North American sports leagues, including MLB and the NHL, assign to their league the live video broadcast rights to at least some games, which the league then sells to a national network. The pooled rights that are sold by MLB, the NBA, and the NHL cover only a small fraction of all league games, but the NFL pools and sells television rights to all league games. Although the rights to televise all NFL games are sold to national broadcast networks, the actual telecasts of most games are regionalized in that they are televised only or primarily in the television markets of the teams in the contest plus nearby local television markets. Like MLB and the NHL, the NBA (League Pass) and the NFL (Sunday Ticket) also sell access to “out-of-market” regionally televised games.

League Structure

In North America professional leagues typically are joint ventures that are owned by the teams in the league. Consequently, the sale by a league of television rights is the product of an agreement among teams to pool some individual team television rights and to collaborate in deciding the content and price of the package of games. In addition, in North American sports leagues, members play games against only other league members, and the decision to admit new members to a league is made jointly by existing members. This organizational structure is not necessary to successful operation of a league.

The National Collegiate Athletic Association (NCAA) performs league functions for approximately 1,200 colleges and universities in the United States in 23 sports.⁹³ The NCAA determines which schools can be members of the organization and participate in NCAA sports, limits roster sizes in each sport, defines eligibility to participate, and makes playing rules. The NCAA also organizes national championship events. In Division I, the “major league” for college sports, the NCAA organizes 38 national championships in 23 sports, 18 for men, 19 for women, and one (fencing) for coeducational teams.⁹⁴ Among the national championships that are organized by the NCAA are baseball and men’s hockey.

Nearly all member colleges of the NCAA belong to conferences that also perform league functions. Conferences determine their own membership, have latitude to make their own rules as long as these rules are consistent with NCAA rules, and arrange league schedules that lead to conference championships. In addition, other entities also organize college championship events. Historically, the most famous was the National Invitation Tournament in basketball, which was

⁹³ See <http://www.ncaa.org/about/who-we-are/membership> and <http://www.ncaa.org/about/what-we-do/championships>.

⁹⁴ See <http://www.ncaa.org/championships?division=d1>.

organized by five New York City colleges before it was acquired by the NCAA as part of a settlement of an antitrust complaint (*Metropolitan Intercollegiate Basketball Association v. NCAA*) in 2005.⁹⁵

Auto racing in North America has several leagues that are not owned by member teams, and membership in auto racing leagues is not exclusive. NASCAR and Indy Racing are distinct, separate entities from the race car teams that participate in their events.⁹⁶ Formula 1 is an international racing league that schedules one event each year in the U.S. and that also is a separate entity from the teams that race in its events. Indy Racing also owns the Indianapolis Motor Speedway, which hosts the most famous event in its series of races, but also includes races at many other tracks in its season schedule. A team in auto racing normally sponsors several drivers, sometimes in different leagues. For example, Team Penske is a leading participant in both Indy Racing and NASCAR,⁹⁷ and in 2013 Danica Patrick switched from Indy Racing to NASCAR, causing audience ratings for NASCAR to rise while ratings for Indy Car fell.⁹⁸

Professional soccer leagues in Europe are owned by teams, but the operating rules of the league, including eligibility for membership, are supervised by national governing bodies for the sport. Despite holding an ownership stake in leagues, teams in a league can play in and be partial

⁹⁵ Andy Katz, "NCAA Buys Tournaments, Ends NIT Litigation," *ESPN.com*, August 17, 2005, at <http://sports.espn.go.com/ncb/news/story?id=2136724>.

⁹⁶ Peter von Allmen, "Is the Reward System of NASCAR Efficient?" *Journal of Sports Economics* Vol. 2, No. 1 (February 2001), pp. 62-79, and Craig A. Depken, II, and Dennis P. Wilson, "The Efficiency of the NASCAR Reward System," *Journal of Sports Economics* Vol. 5, No. 4 (November 2004), pp. 371-86.

⁹⁷ See <http://www.teampenske.com/about/>.

⁹⁸ "Year in Sports Media Report: 2013," Nielsen Company, 2014, p. 14.

owners of several leagues simultaneously.⁹⁹ For example, an English major-league soccer team may participate in four distinct leagues: the Premier League, the Football League Cup, the Football Association Cup, and either the European Champions League or the Europa Cup.

The Premier League organizes an annual round-robin schedule of matches that is analogous to the regular season of MLB or the NHL, but does not organize a playoff elimination tournament. The Premier League is owned jointly by its member teams and the Football Association, the governing body for soccer in England to which all amateur and professional soccer teams belong.¹⁰⁰ Membership in and ownership of the Premier League changes from year to year because, after each season, the three teams with the worst records are relegated (demoted) to the highest minor league, while three teams from the highest minor league are promoted to the Premier League.¹⁰¹ The system of promotion and relegation is used for all eleven levels of the hierarchy of leagues, including three minor leagues that are operated by the Football League (Championship League, League One, and League Two), and additional levels of semi-professional and amateur leagues that are operated by the Football Association and by county football associations. An important aspect of the system of promotion and relegation is that teams do not have “home territories” in which they enjoy protection against competitive entry. Any team, regardless of its home location, can gain entry to the Premier League by winning in

⁹⁹ Stephen F. Ross and Stefan Szymanski, “Antitrust and Inefficient Joint Ventures: Why Sports Leagues Should Look More Like McDonald’s and Less Like the United Nations,” *Marquette Sports Law Review* Vol. 16, No. 2 (Spring 2006), pp. 213-60.

¹⁰⁰ See <http://www.premierleague.com/content/premierleague/en-gb/about/who-we-are.html> and <http://www.premierleague.com/content/premierleague/en-gb/about/formal-relations.html>.

¹⁰¹ Roger G. Noll, “The Economics of Promotion and Relegation: The Case of English Football,” *Journal of Sports Economics* Vol. 3, No. 2 (May 2002), pp. 169-203, and Stefan Szymanski and Tommaso M. Valetti, “Promotion and Relegation in Sporting Contests,” *Revista de Politica Economica* (May/June 2005), at http://www.dsl.psu.edu/centers/sports_institute/articles/Szymanski%20Valetti%20promotion%20relegation.pdf.

lower leagues and so being promoted through the hierarchy. The Premier League normally includes six or seven teams from London and multiple teams from other large metropolitan areas.¹⁰²

Second is the Football League Cup, an annual elimination tournament among all 92 professional soccer teams (major and minor league). The Football League Cup resembles the post-season tournaments that are organized by major North American professional sports leagues. The major difference is that all professional teams qualify for the Football League Cup, rather than limiting participation only to the top major league teams, as is done in the U.S. The Football League Cup is organized by the Football League, an entity that operates the three minor professional soccer leagues that rank below the Premier League: the Championship League, League One, and League Two. The Football League is owned by the 72 teams that belong to its three leagues.¹⁰³ Teams in the Premier League are not members of the Football League, but they participate in the Football League Cup.

Third is the Football Association Cup, an annual elimination tournament among over 700 professional and amateur soccer teams. Like the League Cup, the Football Association Cup is an elimination tournament that runs during the regular season from August to May. The Football

¹⁰² In 2013-14, the London teams in the Premier League are Arsenal, Chelsea, Crystal Palace, Fulham, Tottenham and West Ham. In addition, Queen's Park Rangers recently played in the Premier League, and Millwall, although not a Premier League member, reached the final game of the Football Association Cup and qualified for the Europa League in 2004. Both of these clubs now play in the Championship League. Also in the London area are Charlton Athletic (Championship League) plus four other teams that play in either League One or League Two. In the Manchester metropolitan area, current Premier League members are Manchester City and Manchester United, but Bolton and Wigan, now in the Championship League, also have recently played in the Premier League, and three other Manchester area teams play in the Football League. For current league memberships, see <http://www.football-league.co.uk/page/Home/0,,10794,00.html> and <http://www.premierleague.com/en-gb.html>.

¹⁰³ For history and rules of the Football League, see <http://www.fl125.co.uk/history> and <http://www.football-league.co.uk/page/RegulationsIndex/0,,10794,00.html>.

Practices in selling television rights also vary among leagues. In college football and basketball, most live television rights are sold by many conferences, creating a highly competitive market that causes a very large number of games to be telecast throughout the U.S. without territorial restrictions.¹⁰⁹ In Europe national policies differ regarding whether leagues can pool the sale of live television rights, and as a result the role of a major league in selling television rights varies from none to full control among the top soccer nations.¹¹⁰ UEFA controls the rights to televise its championship tournaments and sells the television rights to these games on a nation-by-nation basis, even though all of the participants in these events also are members of national soccer leagues.¹¹¹

The variety of sports leagues around the world indicates that the common core functions of a league – the reference product in the provision of league services – is standardization. All leagues promulgate rules of play and participation, create schedules for league seasons, and enforce league rules. Engaging in other business activities and requiring exclusivity of membership and play are not core attributes of a league.

the middle of the tournament in which the survivors to that point are divided into eight groups of four teams and play a double round-robin schedule, with the top two teams in each group moving on to the next elimination round. Top seeded teams enter the competition in the group play stage when 32 teams remain.

¹⁰⁸ See <http://www.uefa.org/aboutuefa/organisation/index.html>.

¹⁰⁹ Originally almost all live college football television rights were controlled by the NCAA, but this system came to an end when the NCAA lost an antitrust case for monopolizing the sale of college football television rights in *NCAA v. Board of Regents*, 468 US 85 (1984).

¹¹⁰ For a discussion of the variety of ways that leagues in Europe and North America are involved in selling television rights, see Roger G. Noll, “Broadcasting and Team Sports,” *Scottish Journal of Political Economy* Vol. 54, No. 3 (July 2007), pp. 400-21.

¹¹¹ See <http://www.theguardian.com/sport/2013/nov/09/bt-sport-champions-league-exclusive-tv-rights> for details about the sale of the British rights for 2015-18 and <http://www.insideworldfootball.com/matt-scott/13386-matt-scott-high-stakes-game-for-tv-rights-will-keep-uefa-s-club-giants-content> for details about rights in other nations.

In the U.S. multiple leagues compete for team members in intercollegiate sports and auto racing, but not in major league team sports. In the past, new leagues have attempted to enter every major professional sport, but in every case have either failed or merged into the established league.¹¹² At present there are no close substitutes for the established league in each of the four major-league team sports, including MLB and the NHL. In the competition for league members, a major league in one sport is not a competitive substitute for a league in another sport. Hence, the relevant product market is major league services in a specific sport.

Conclusions

On the basis of the evidence and analysis in this section, I conclude that the relevant market in which a league (MLB or the NHL) sells its out-of-market packages are nationwide markets for telecasts of major league games in that sport. This relevant market includes all distribution methods for game telecasts: over-the-air stations, MVPD channels, and Internet streaming video services. In addition, because of league practices that divide home broadcast territories among league members, I conclude that the geographic demarcations of home television territories in each league constitute relevant submarkets that otherwise would not exist, with each submarket defined by the specific teams in the league that are permitted to have their games telecast in that territory. Likewise, I conclude that the relevant market for attendance of a team in any major league sport includes teams in the same sport that also play home games in the same metropolitan area. Finally, I conclude that the provision of core league functions in each sport is a relevant product market.

¹¹² See James Quirk and Rodney D. Fort, *Pay Dirt*, Princeton University Press, 1992, Chapters 8 and 9, pp. 294-361.

Exclusion of Competitors

Market power includes the ability to exclude competitors. Hence, one indicator of market power is the ability of incumbent firms to force other firms to exit the market or to prevent entry of new firms. The concept of exclusion is related to the concept of a barrier to entry in that exclusion can involve conduct by one or more incumbents that raises the cost of entry sufficiently that competitors cannot enter.

Application to Major League Sports

The products that are the main focus of this litigation are the out-of-market packages to telecasts that are offered by MLB and the NHL. In addition, other products that are closely related to the reference products are the sale of television rights by teams in each league within their designated home broadcast territories, the sale of attendance and related products at home games by teams in each league, and the provision of league services by MLB and the NHL to their respective members.

Margins

One measure of the market power of a firm is its profit margin. Both MLB and the NHL have produced some useful data about the costs and revenues of their out-of-market bundles of televised games. These data show that the profit margins for the league packages are extremely large, implying that both leagues exercise substantial market power in setting prices for these packages.

The data from MLB show actual revenues and costs in 2011 and projections for 2012 for MLB.tv, the Internet stream of out-of-market games, and two other products: an audio feed of

games and a club for visitors to MLB.com.¹³¹ These data show that MLB.tv's actual revenues on 2011 were [REDACTED] and projected revenues in 2012 were [REDACTED].¹³² Actual costs in 2011 and projected costs in 2012 are not clearly separated between MLB.tv and the other products, but after separating the costs of the club, the remaining costs are [REDACTED] for 2011 (actual) and [REDACTED] for 2012 (projected), some of which may be attributable to these other services. Thus, the profits from MLB.tv were at least [REDACTED] in 2012 (projected). These data imply that the profitability of MLB.tv was at least [REDACTED] percent of revenue in 2011 (actual) and [REDACTED] percent of revenue in 2012 (projected).

To calculate Lerner Indexes for MLB.tv in 2011 and 2012 requires further separating the costs into those that are incremental with respect to subscribers and those that are fixed costs that are independent of the number of subscribers. The data in the spreadsheet that was provided by MLB is insufficiently documented to permit such a separation, so for the purpose of providing an illustrative calculation I assume that *all* of the costs in the spreadsheet are marginal costs.¹³³ Under this assumption, the Lerner Index is the profit margin, or 0.774 in 2011 (actual) and 0.839 in 2012 (projected), both of which are near the maximum value of 1.0 and far above 0.05, the level that gives rise to antitrust concerns in the case of a merger. Thus, the margin data show that MLB enjoys substantial market power in the sale of MLB.tv.

¹³¹ The data were produced as a spreadsheet (Bates No. MLB0108889).

¹³² The spreadsheet also shows a forecast of MLB.tv revenues, based on the actual revenues for the first four months of actual data in that year, of [REDACTED]; however, there is no analogous cost forecast for the new revenue projections, so the revised profit margin cannot be calculated.

¹³³ This assumption is certain to overstate marginal costs. Note that the actual costs in 2011 were higher than the projected cost of serving more subscribers in 2012, indicating that the average cost in 2011 was not the marginal cost of a subscriber. Thus, my calculations bias the Lerner Index downwards (indicating that MLB has less market power than it truly has).

The NHL has produced revenue and cost data for its out-of-market television package for the fiscal year 2012 (the 2011-12 season) and budget projections for fiscal year 2013 (the 2012-13 season).¹³⁴ Although the NHL locked out its players for the first half of the season in 2012-13, the budget projections were for an entire year of operation. The revenue from subscriptions was [REDACTED] in 2012 (actual) and [REDACTED] in 2013 (forecast). Operating profits were [REDACTED] in 2012 (actual) and [REDACTED] in 2013 (forecast), implying operating profits of 82.1 percent of sales in 2012 and 74.9 percent of sales in 2013.¹³⁵ As with MLB, there is not sufficient information to separate marginal costs from other costs, so assuming that all costs are marginal costs, the implied Lerner Indexes for these years are 0.821 and 0.749, respectively. Again, these values are far above the 0.05 that would give rise to antitrust concerns in a merger.

Data have been produced for the revenues and expenses of all 30 MLB teams for the period 2006 – 2012.¹³⁶ These data show that average revenue from local broadcasting was [REDACTED] in 2012, up [REDACTED] from [REDACTED] in 2006. Data from all sales of national television rights (including Internet streaming) are not reported, but can be approximated by summing the net revenues from the major league central fund, MLB Advanced Media, and the MLB Network. The amount per team of this sum rose by [REDACTED] from [REDACTED] in 2006 to [REDACTED] in 2012. Thus, total revenue from these sources, which is accounted for

¹³⁴ Bates Nos. NHL1779546-55 at 46-47.

¹³⁵ The lower margin in 2013 despite higher projected revenue is a puzzle because one would expect an Internet streaming service to exhibit economies of scale. In fact, the budget for 2013 anticipated that about 40 percent of the growth in revenue between 2012 and 2013 would be spent on increased costs. The implication that the marginal cost of serving a subscriber substantially exceeds the average cost is not plausible.

¹³⁶ Bates Nos. MLB1002651-81.

primarily by television, rose from [REDACTED] in 2006 to [REDACTED] per team in 2012, an increase of 37 percent.

Data for the NHL teams in the 2011-12 season also have been produced.¹³⁷ These data show that the average revenue per team from local television was [REDACTED],¹³⁸ while total revenue from national broadcasting was [REDACTED] per team, for a total of [REDACTED].

The only non-trivial costs that a team faces in selling the rights to televise its games are the costs of negotiating the sale of television rights and accommodating game broadcasts within a playing facility. Neither of these costs are reported in the data. Nevertheless, these costs are not remotely close to the revenues that teams obtain from telecasts of games, implying that the margins and Lerner Indexes for teams from the sale of television rights are high and indicate the presence of substantial market power.

The exercise of market power in the sale of league packages is illustrated by MLB's short-lived decision to grant DirecTV exclusive rights to its league package of Games, Extra Innings, in 2007. The contract for exclusive rights that MLB negotiated with DirecTV called for rights fees totaling [REDACTED], beginning at [REDACTED] in 2007 and rising to [REDACTED] in 2013, [REDACTED].¹³⁹

After a public and Congressional outcry over the loss of Extra Innings to subscribers of other MVPDs, MLB agreed to eliminate the exclusivity, and the result was lower total revenues from Extra innings: [REDACTED] over the same period, rising from [REDACTED] in 2007 to [REDACTED]

¹³⁷ Bates No. NHL3655230.

¹³⁸ Local television revenue was calculated as total broadcast revenue minus revenue from radio broadcasting.

¹³⁹ Bates Nos. DTV-SP7156-246.

██████ in 2013, with no extra payment from additional revenues to the MVPDs.¹⁴⁰ These contracts show that DirecTV was willing to pay at least ██████ more than the total fees MLB ultimately received from the entire market in order to obtain exclusivity.

The ability to extract more revenues from an exclusive contract arises because out-of-market telecasts are a subscription driver for MVPDs. The benefits of exclusivity to the licensee then can be captured by MLB through higher rights fees by auctioning the exclusive rights to the highest bidder. If live telecasts of other sports, or other types of programming, were close competitive substitutes for MLB Extra Innings, DirecTV would not be able to obtain greater revenue from subscribers by obtaining exclusive rights, and so MLB would not be able to extract additional revenue by selling Extra Innings on an exclusive basis.

Concentration and Exclusion of Competitors

The relevant markets in which television rights are sold include only telecasts of games within the same major league, but because the geographic scope of television markets is national, the relevant market in which television rights within a sport are sold, this market is not inherently highly concentrated. In principle, all 30 teams in each sport could be present in this national market, in which case the standard measure of concentration would be very low.

As discussed elsewhere, league rules in each sport have divided the nation into a series of home broadcast territories, the vast majority of which include very few teams, and in many cases only one team. Thus, league policies divide a national market into a series of regional submarkets. In markets in which a single team has home broadcast rights, the available options for viewing live telecasts of games are the RSN of the home team, national telecasts of live

¹⁴⁰ Bates Nos. DTV-SP8886-944.

Sources of Market Power

Market power is a neutral fact that does not necessarily imply that market power was obtained, enhanced or maintained by anticompetitive conduct. Market power can arise from superior efficiency, which can be a barrier to entry if an incumbent firm is so efficient that no other firm can hope to compete effectively with it. But market power also can arise from anticompetitive conduct. For example, incumbent firms may succeed in raising prices and obtaining higher profits by engaging in price collusion in the presence of entry barriers. The source of market power that produces super-competitive prices and profits from collusion is anticompetitive conduct, not superior efficiency.

The high degree of concentration in local television markets does not arise solely from the superior efficiency of the team that has territorial broadcast rights in any given geographic area. Instead local market power in television rights is enhanced by league rules that limit the natural competition that would arise in a market with natural national geographic scope. These league rules work to suppress competition because there is only one league in each major league team sport. And each league is a joint venture among its members teams, so exclusive territorial rights are the result of collusion among teams in a league not to engage in competition in the sale of television rights.

As an initial matter, the creation of exclusive territorial broadcast rights has no plausible explanation if the effect of these rules is not to increase the market power of the teams in a league in selling their broadcast rights. If live telecasts of the games of an out-of-market team would not reduce the value of the rights to offer live telecasts of the games of an in-market team, all teams in the league could increase their profits by eliminating territorial broadcast exclusivity.

In fact, allowing more teams to televise games into any DMA in the nation would increase the total audience for live game telecasts in a sport. The presence of out-of-market displaced fans creates a demand throughout the nation for live telecasts of games involving that team. Moreover, because RSNs already distribute live telecasts of the in-market games of a team, the incremental cost of allowing those games to be shown to out-of-market fans is extremely small, and indeed the biggest MVPDs already carry a large number of RSNs in out-of-market areas, but then black out the live games of the out-of-market MLB and NHL teams that are carried on those RSNs.¹⁴⁵ Thus, the possibility for additional revenue at little or no additional cost creates a financial incentive for RSNs to allow the games that they telecast to be made available everywhere in the U.S., which in turn enhances the value of each team's broadcast rights to the RSN.

From the perspective of an entire league, enhancing the total audience of the sport by allowing live game telecasts of every team to be made available throughout the nation is not attractive if the audience enhancement effect is more than offset by the increase in competition. While allowing an out-of-market team into a DMA captures additional audience from displaced loyal fans of that team, it also increases the competition for the part of the audience that is accounted for by fans who are not strongly attached to any particular team but are fans of the sport more generally. The success of national live broadcasts that are sold by the league would not be possible if each sport did not have a substantial number of fans who are sufficiently interested in the sport as a whole that they will watch games involving teams other than a team to which they have a special attachment. To an out-of-market team and its RSN, attracting these fans to live game telecasts is every bit as attractive financially as attracting displaced loyal fans

¹⁴⁵ For example, DirecTV offers subscribers a special sports package that allows its subscribers to access 31 RSNs plus other sports channels. See http://www.directv.com/sports/sports_pack.

of the team, but the competition for these fans would drive down both the carriage fee that an RSN could charge and the rights fee that an RSN would be willing to pay to televise the games of a team. League rules that create exclusive home television territories are comprehensible business policies only if the goal is to prevent this competitive outcome.

The evidence that has been produced in this case confirms that teams and their RSNs will take advantage of the opportunity to televise live games into more DMAs if there is no agreement to divide DMAs among the teams in the league. Indeed, the very existence of the league packages of live out-of-market games that are distributed over both MVPDs and the Internet, and the high profit margins that the leagues obtain from these packages, proves that the demand for access to live out-of-market games is more than sufficient to induce these games to be offered nationally.

The RSNs that already are available nationally over MVPDs, even though their live telecasts of MLB and NHL teams in their home region are blacked out in out-of-market areas, establishes that in the absence of territorial rights and blackouts, these out-of-market games would be available nationally. Christopher Tully, the Senior Vice President for Broadcasting of MLB, testified that the current practice of nationwide distribution of RSNs, even with live games blacked out, has an adverse competitive impact on in-market teams, using as an example complaints by the Tampa Devil Rays about the distribution of the YES Network in Florida, even though the Yankees games on YES are blacked out.¹⁴⁶ Many documents that have been produced in discovery report similar disputes among teams that have arisen when one team encroaches on the home territory of another or efforts by teams and broadcasters to televise live games outside

¹⁴⁶ *Deposition of Christopher S. Tully*, November 22, 2013, p. 178.

of home broadcast territories.¹⁴⁷ These documents demonstrate that teams and their RSNs have an incentive to compete by entering the exclusive broadcast territories of other teams and the purpose of these rules is to prevent such competition from occurring.

The effect of the agreements not to compete in each league is to reduce the number of close competitive substitutes for the telecasts of games in a local area that is within the home broadcasting territory of any given team. The expected effect of eliminating most or all close substitutes is to cause an increase in the price of the remaining telecasts that are available.

The evidence that has been produced through discovery shows that the defendants agree that the purpose of the conduct at issue in this litigation is to reduce competition and to elevate prices, which makes sense only if telecasts of games of different teams are close competitive substitutes. In explaining why teams and RSNs want exclusivity in local television markets, the Commissioner of Baseball stated that “if you spent many millions for an RSN, and the next thing you start bringing in games from all over, it's absurd... [E]very team can't win every year, and so

¹⁴⁷ *MLB Documents*: Bates Nos. COM-00031973-4 (White Sox expansion of territory), JWH0140-44 (Red Sox in Fairfield, Connecticut), MLB0370142 (Giants-Phillies game in Florida), MLB0370146-48 (several examples of stations wanting to carry out-of-market games), MLB0370176-78 (request for out-of-market telecasts), MLB0370198 (request for out-of-market telecasts), MLB0370245-46 (requests for out-of-market telecasts), MLB0370284-85 (Reds in Florida), MLB0370343 (Dodgers in Texas), MLB0482364-411 (Cubs and White Sox out of territory telecasts), MLB0485165-218 (responses to numerous requests for out-of-market telecasts). *NHL Documents*: MSG-00000043 (Rangers in upstate New York), MSG-00000474-75 (Rangers on Internet, expansion of Devils' and Islanders' territories), NHL005470 (Detroit and Columbus seek larger territories), NHL0051669-70 (Buffalo seeks larger territory), NHL0051718-21 (Columbus, Detroit and Pittsburgh all want broader territories), NHL1406311-13 (Buffalo and New York Rangers dispute about territories), NHL1407693-94 (Washington pays to encroach on Carolina's territory), NHL1431790-91 (Florida and Tampa prefer to share entire state when they play against each other), NYI0071040-48 (Islanders and Buffalo dispute over rights to Rochester, New York).

telecasts of a team also enjoys substantial market power due to the limits on the number of teams that can sell television rights in the same DMAs that are in the home broadcast territory of the team from whom the RSN obtained rights.

ANTICOMPETITIVE EFFECTS

In antitrust economics, anticompetitive effects are the harms to the competitive process that are caused by anticompetitive conduct. Conduct by a supplier or group of suppliers is anticompetitive if it causes harm to buyers, in this case to consumers who purchase or who would like to purchase access to telecasts of out-of-market games in a major league sport. The harm to competition takes two forms: a reduction in the choices that are available to consumers, and increases in the prices of access to telecasts of games that cause a reduction in consumption of game telecasts. Both of these anticompetitive effects can be demonstrated by a “direct effects” analysis of the effect of league rules regarding out-of-market telecasts.

Choice and Quantity

The rules of each league that limit the distribution of game telecasts restrict the choices available to consumers and the quantity of output in live game telecasts. The proper measure of quantity is the number of consumers who view live telecasts, whether through MVPDs or over the Internet. League rules affect quantity by restricting the choices available to consumers in two ways. First, every DMA is in the home broadcast territory of at most a few teams. Teams cannot offer live telecasts of their games through an MVPD in any submarket that is outside of their home broadcast market. Second, RSNs that have obtained television rights to provide live game telecasts in a team’s home broadcasting territory have not been permitted to sell streams of live

telecasts over the Internet as a stand-alone product even in the team's home territory. As a result, all Internet streaming sales effectively have been preserved for the league's package, which, as discussed elsewhere, is offered on terms that are designed to minimize its effect on local and national live telecasts. These restrictions in turn cause higher prices for access to the games that are permitted to be telecast within a DMA. Higher prices and restricted choice of games then reduce the number of viewers of live games in each league.

As shown in Exhibit 1, a few DMAs that do not have a home-town team in MLB and/or the NHL are in the home broadcast territories of multiple teams. The reduction in choice that is created by the agreements among teams in a league not to compete in out-of-market areas is illustrated by the carriage of RSNs in DMAs in which three or more teams share territorial broadcast rights. The issue examined here is whether the demand for RSNs that carry out-of-market teams is sufficient to cause those RSNs and the telecasts of the teams that they carry to be picked up by MVPDs in these markets.

One indicator of the demand for live games in each sport is the extent to which the RSNs of teams that have the rights to a DMA are actually carried by MVPDs in that area. Exhibits 5A (MLB) and 5B (NHL) list the top 75 markets with no home team in which three or more teams have territorial rights to telecast live games into the DMA. Exhibit 5A pertains to the 16 DMAs in which three or more MLB teams have home broadcast rights, and Exhibit 5B pertains to the three DMAs in which three or more NHL teams have home broadcast rights. The first column in the exhibit contains the names of the principal city in the DMA. The second column lists the teams that have territorial rights to live telecasts in that DMA. The third column shows the RSNs that televise the live games of these teams. The fourth column indicates whether at least one of

the principal MVPDs in the area – DirecTV, Dish TV, and the largest cable television system – carries that RSN.

Exhibits 5A and 5B demonstrate that when league rules grant home broadcasting rights to several teams in a distant DMA, the RSNs that telecast these games almost always are offered to consumers in those cities. For example, RSNs that televise all six of the MLB teams that claim Las Vegas as part of their home broadcast territory are carried by DirecTV in southern Nevada (Comcast SportsNet carries the A's and Giants, Fox Prime Ticket carries the Angels and carried the Dodgers last year, Time Warner SportsNet LA will carry the Dodgers this year, Fox Sports San Diego carries the Padres, and Fox Sports Arizona carries the Diamondbacks). Five of these RSNs are on the lowest DirecTV tier (Choice) that carries any out-of-market RSNs (this tier includes 150+ cable channels), and the sixth RSN, Fox Sports Arizona, is available on a higher tier (Premier) or by purchasing an additional bundle of sports channels.

In five of the 16 DMAs,¹⁵⁶ in which three or more MLB teams have home broadcasting rights, there is an RSN that televises games of one of these teams that is not carried by an MVPD in that market. In every case more teams have their games carried by at least one MVPD than the one or two teams that are permitted in most local markets. These carriage data show that consumer choice is reduced by the lower limit on the number of teams that are permitted to televise their games into most markets.

Another indicator of the demand for out-of-market games is the national availability of live telecasts of minor league games. MLB offers a package of minor league games as an Internet streaming service that includes all AAA teams plus some games involving teams from

¹⁵⁶ Comcast Sports Network Houston televises Astros games and apparently is not carried in Oklahoma. Root Sports Northwest carries the Mariners and is not televised in Hawaii, and Root Sports Pittsburgh telecasts the Pirates but is not carried in Buffalo and Columbus.

AA and A leagues. The price of this package in 2013 was \$39.99 as a stand-alone service or \$25 as an add-on to MLB.tv. The American Hockey League, a minor league with 30 teams nationwide,¹⁵⁷ also makes telecasts of its games available on a streaming Internet service, AHL Live, that can be viewed on either a personal computer, a tablet, or a smartphone. Consumers can purchase the entire package for \$149.99, the games of just one team for \$79.99, any ten games for \$59.99, all away games of a single team for \$49.99, any five games for \$31.99, or any single game for \$6.99.¹⁵⁸ The teams in both of these leagues are much less popular than MLB or NHL teams, yet the demand for them is sufficient to induce the provision of their live games on the Internet.

The prevention of Internet streaming of games except in the league packages has harmed consumers by creating an impediment to the ongoing migration of video program consumption from traditional television (over-the-air, cable and satellite) to Internet distribution. For the year ending in June 30, 2013, the total number of subscribers to MVPDs fell by over 1.5 million as an increasing number of households are relying on the Internet for video entertainment.¹⁵⁹ Reflecting the trend in other types of video programming, between April 2012 and September 2013, the number of households who accessed video on a sports web site using a smartphone rose from 35.5 million to 61.7 million, an increase of 74 percent, and the average amount of time these viewers spent watching sports per month increased by 56 percent.¹⁶⁰ The combined effect of more viewers doing more viewing caused the total amount of viewing to increase by 171

¹⁵⁷ See <https://ahl.neulion.com/ahl/secure/registerform>.

¹⁵⁸ See <https://ahl.neulion.com/ahl/secure/registerform>.

¹⁵⁹ Jeff Baumgartner, "U.S. Pay-TV Providers Lost 366,000 Subs in Q2: SNL Kagan," *Multichannel*, September 3, 2013, at <http://www.multichannel.com/distribution/us-pay-tv-providers-lost-366000-subs-q2-snl-kagan/145242>.

¹⁶⁰ "Year in Sports Media Report: 2013," Nielsen Company, p. 4.

percent in just 17 months. Watching videos from sports sites on a computer also increased by 36 percent, while viewing of sports on television rose by 27 percent.

As discussed elsewhere, the league packages are structured to minimize the extent to which these packages effectively compete against local telecasts of live games. The restrictions are greater for Internet streaming because leagues effectively have prevented teams from streaming their live telecasts even in their home broadcast territories. Thus, the growing number of households who receive video entertainment exclusively from the Internet, as well as MVPD customers who would like the convenience of watching live games on smartphones and other mobile devices, can only obtain Internet streams of games by purchasing the league package, which has been assembled and offered on terms designed to minimize disruption of the demand for telecasts through traditional television outlets. Consumers are unable to receive over the Internet the games of the teams that have home territorial rights to the DMA in which the consumer lives, which limits access to games even for those consumers who are willing to purchase the league's package of out-of-market games.

Effect on Prices

From the perspective of economic theory, exclusive home broadcast territories plus the terms on which league packages are offered can be expected to lead to higher prices for both television rights that are paid by RSNs and prices that consumers pay for league packages. The availability of league packages of out-of-market games provides an opportunity to use the data on subscriptions to these packages and viewing patterns of subscribers to estimate the price that each channel in the package would command if the package were offered on an unbundled basis.

Conceptually, the problem of estimating the value of the components of the out-of-market packages is similar to the problem of estimating the prices that MVPDs would charge for individual channels if they were required to offer their current bundles of channels on an a la carte basis. A method for calculating the stand-alone market prices for each channel in a bundled MVPD package was published in a recent article in the *American Economic Review*.¹⁶¹ The model assumes that each consumer derives welfare (utility) from spending time watching each channel plus time spent doing other things, and maximizes the utility-weighted sum of time allocation minus the utility that otherwise could be derived from the amount that is charged for channels.

To implement this model requires a large sample of consumer viewing data across the channels in a bundle. The viewing data are used to calculate the means and standard deviations of time spent viewing each sports channel and engaging in other activities. The utility weight for each consumer on the time spent viewing a specific team is then assumed to be drawn from a log-normal distribution,¹⁶² and the parameters of this distribution are estimated using the generalized method of moments to maximize the extent to which the estimated weights explain the pattern of viewing behavior.

Using these estimates of the distribution among consumers of the utility weights for each channel, the demand relationships for individual channels are estimated. These demand functions

¹⁶¹ Gregory S. Crawford and Ali Yurukoglu, “The Welfare Effects of Bundling in Multichannel Television Markets,” *American Economic Review* Vol. 102, No. 3 (June 2012), pp. 643-85.

¹⁶² A consumer’s utility function is assumed to be a weighted sum of a constant plus the logarithms of the viewing times, where team i ’s contribution to utility is $w_i \ln(1+t_i)$. For each consumers j , the logarithm of w_{ij} (the weight on team i for customer j) is calculated as $\ln(w_{ij}) = m_i + Z_j(v_i)^{1/2}$ where m_i and v_i are the mean and variance of the distribution that is estimated using the generalized method of moments for team i , and Z_j is a draw from a normal distribution with mean zero and variance one.

are used to calculate the profit-maximizing prices of each stand-alone channel under the assumption that every channel is offered separately by an independent firm (e.g., an RSN) in a product-differentiated market in which each channel is an imperfect competitive substitute for the bundled package of channels.

Under my direction and with the advice of one of the authors of the published study, Professor Ali Yurukoglu, a version of this model was estimated by economists at Precision Economics for the purposes of calculating the prices that an RSN would charge for each team's games on a stand-alone basis and the price of the league package if it had to compete against these stand-alone offerings. The data that were used in implementing this model are the amount of time spent viewing each channel on the Internet versions of the two league packages, MLB.tv and NHL GameCenter Live. The model that was estimated differs from the published model in three ways.

First, the published model assumes that an *a la carte* package of unbundled channels fully replaces the bundle. I assume that MLB and the NHL continue to offer the bundled package of out-of-market games. The idea is that consumer choices are expanded to include unbundled as well as bundled services and that each of these services is priced independently. Thus, the league packages become a competitor of the unbundled, stand-alone channels. The model then estimates the common national price that a league would charge for the package of out-of-market games if it had to compete with the RSNs that distribute the games of each team in the league.

Second, the published model assumes that each channel engages in a bilateral negotiation with an MVPD that has market power over the price of each unbundled channel and that these unbundled channels compete for carriage on an MVPD system according to the *Nash-Bertrand* model of imperfect competition among product differentiated firms. The model that is used here

is based on the assumption that the buyer of the league package and the stand-alone channels lacks bargaining power. The basis for this assumption is that the channels are being offered to consumers directly as an Internet streaming service. If Internet delivery is a competitive substitute for delivery over an MVPD, an MVPD also would not have significant bargaining power over the channels in the bundle. In addition, the model assumes that direct competition occurs only between each stand-alone channel and the bundled package of games, ignoring the competition among the unbundled, stand-alone channels. This assumption is made to make calculation of the equilibrium tractable.¹⁶³ These assumptions have a conservative effect on the estimates of the prices of channels and the league package. Bargaining power by the buyer would only lower prices still more, and ignoring competition among stand-alone channels except through the indirect effect that each channel has on lowering the price of the bundle leads to an over-estimate of the equilibrium prices and hence an underestimate of the anticompetitive effect of restrictions on the sale of out-of-market games by an RSN.

Third, the original model included socio-economic data for the local area in which a given customer resides that was incorporated into the demand estimation. This feature of the model has been ignored here, which prevents the estimation procedure from taking into account the effect of blackouts of local games in the league package on the distribution of viewing among teams in estimating team demand relationships. These data can be incorporated later for creating a model that can be used to calculate damages rather than simply to demonstrate the qualitative result that the availability of stand-alone channels reduces the price of the bundled service, and

¹⁶³ The computer times that are required to calculate the equilibrium prices under this simplified assumption are 12 hours for the MLB and 20 hours for the NHL. To add competitive interactions between each pair of teams would substantially increase these run times.

hence that the agreement not to compete causes anticompetitive harm to consumers who bought the bundle.

The data that were used to estimate the consumer choice model are viewing data for Internet streaming services during the 2012 season for MLB and the 2011-12 season for the NHL. The data are the amounts of time spent viewing each team by each consumer in the data set. For the MLB.tv, an observation is the number of games of each home team that were watched by each consumer, which is then multiplied by 1.5 hours as an estimate of the average time spent watching a single game to obtain an estimate of the total time spent viewing each game. For NHL GameCenter Live, an observation is the intensity of viewing each home team in the bundle, measured as the minutes spent viewing each team by each consumer. Exhibits 6A (MLB) and 6B (NHL) show the mean viewing time for each team in each league.¹⁶⁴

The data on viewing time were then used to calculate the relative utility weights for each channel and for the catch-all other activities, using the generalized method of moments. The means and standard deviations of these parameters as well as for the other combined activities are shown in Exhibits 7A (MLB) and 7B (NHL). These relative utilities indicate the rank order of the teams in average popularity, with numbers closer to zero (less negative) indicating greater relative popularity.¹⁶⁵

To calculate profit-maximizing prices requires assumptions about the nature of the competitive interactions among firms (here, the *Nash-Bertrand* model with product

¹⁶⁴ Because of local blackouts, the league packages that are offered to consumers differ in different television markets. This feature of the league packages was not taken into account in estimating the relative utility weights in the consumer welfare function, and as a result is likely to cause a small underestimate of the relative utility of watching teams from the largest markets.

¹⁶⁵ The means of the weights are negative because the formula calculates the logarithm of the weights and the weights are less than one.

differentiation) and the marginal cost of a channel. The former assumption is that channels compete according to the *Nash-Bertrand* model with product differentiation. The latter were assumed to be equal to one minus the profit margins on MLB.tv in 2012 (██████)¹⁶⁶ and for the NHL GameCenter Live during the 2011-12 season (██████).¹⁶⁷

The *Nash-Bertrand* model was calibrated so that the existing prices of the bundles with no stand-alone channels available are profit-maximizing for the leagues. These calculations require estimating the share of each bundle in the potential number of viewers who would subscribe at a price of zero. These shares were calculated as the ratio of subscribers to the bundle divided by the number of households that viewed the league championship games in these two sports, the World Series (MLB) and the Stanley Cup finals (NHL).¹⁶⁸

The equilibrium prices for the out-of-market games for each team and for the bundled package are shown in Exhibits 8A (MLB) and 8B (NHL). These results show two types of anticompetitive harm.

For consumers who continue to buy a bundle, the estimated prices of the bundles are \$47 per season for MLB and \$63 per season for the NHL. These prices are less than half of the actual prices of the bundles, which were \$120 for MLB and \$159 for the NHL. Thus, a lower bound on the harm to consumers who purchased each package is thus \$73 for MLB and \$96 for the NHL. While further refinements to the model are likely to produce better estimates of these prices, any

¹⁶⁶ Bates No. MLB0108889.

¹⁶⁷ Bates Nos. NHL1779546-55 at 46-47.

¹⁶⁸ World Series viewing is from “World Series Has Record Low Rating,” *ESPN*, October 30, 2012, at http://espn.go.com/mlb/playoffs/2012/story/_/id/8570950/world-series-finishes-record-low-rating. Stanley cup viewing is from “Stanley Cup Finals TV Ratings: 2012 Series Hits Lowest Numbers since 2007,” *SB Nation*, June 13, 2012, at <http://www.sbnation.com/nhl/2012/6/13/3083145/stanley-cup-finals-tv-ratings-2012-series-hits-lowest-numbers-since>.

model that introduces competition for the sale of telecasts of out-of-market games will produce a similar result: competition would be expected to eliminate a large proportion – much more than half – of the excess mark-up over marginal cost that is enjoyed by a monopoly. Thus, these calculations are sufficient to demonstrate that consumers suffered substantial harm from restricting competition in the provision of out-of-market telecasts.

For consumers who would buy one stand-alone channel and not the bundle (for two or more stand-alone channels, the bundle is always less expensive for the NHL and almost always less expensive for MLB¹⁶⁹), the anticompetitive harm arises because these consumers are intense fans of a single team. Among existing consumers, these fans save even more – roughly 80 percent of the current price of the bundle, but for access to many fewer games. Other consumers who do not now subscribe, but who would purchase either a stand-alone channel or the bundle at a lower price, represent the efficiency loss arising from the current monopoly price of the bundle due to the absence of competition from unbundled channels.

BUSINESS JUSTIFICATIONS

In antitrust economics, anticompetitive conduct has a reasonable business justification if the conduct delivers benefits to consumers that exceed the anticompetitive harm arising from the conduct and if these benefits cannot reasonably be obtained by conduct that is less restrictive and so less harmful to consumers. One textbook in antitrust economics puts the matter as follows:

¹⁶⁹ For no NHL teams and five MLB teams the stand-alone price is less than half of the price of the bundle. Any combination of two of the stand-alone channels for these five MLB teams plus some combinations of one of these teams plus one of three other teams with prices only slightly higher would be cheaper than buying the bundle.

Any restraint that hindered consumer welfare was unreasonable, and an unreasonable restraint could not be saved by resorting to other social values.¹⁷⁰

Following this principle of antitrust economics, the key elements of a business justification for anticompetitive conduct are the following. First, the benefit from the conduct must be an improvement in economic efficiency. Anticompetitive conduct cannot be justified on the basis of a benefit that accrues to the parties that engage in that conduct, nor can an appeal to some other social value that is not a benefit to consumers justify anticompetitive conduct. Second, the amount of the efficiency benefit that is passed on to consumers must exceed the harm to consumers arising from anticompetitive conduct. Both the benefit and the harm to consumers must be quantified to determine whether the former offsets the latter. Third, if consumers receive a net benefit, conduct that causes harm is not anticompetitive only if there is no other reasonable way to deliver this benefit to consumers that causes less anticompetitive harm. If a reasonable, less restrictive method for capturing the efficiency benefit exists, the conduct that caused harm to consumers is not justified.

I understand that this litigation is not yet at the stage where the defendants would present their arguments and evidence pertaining to business justifications, so a complete analysis of this issue is not feasible at this time. Nevertheless, defendants have presented several business justifications for each league's policies regarding territorial broadcasting rights in their responses to plaintiffs' interrogatories. These justifications are as follows. (1) *Single Entity*: the products that each major league produces are the result of cooperation among teams and collaboration in developing the league product, and territorial restrictions are necessary to prevent members of

¹⁷⁰ Roger D. Blair and David L. Kaserman, *Antitrust Economics*, Richard D. Irwin, 1985, p. 58.

the league from “free-riding” on these collaborative activities.¹⁷¹ (2) *Efficiencies of Exclusivity*: exclusive rights give broadcasters the incentive to produce high-quality telecasts of games both locally and nationally, a team the incentive to invest in developing its local market, and cause the number of local telecasts to increase.¹⁷² (3) *Product Creation*: restrictions against teams television games outside of their home broadcast territories provides the opportunity for the leagues to create national broadcasts and the league-wide packages of regionally televised games, thereby increasing the availability of broadcast products to consumers.¹⁷³ (4) *Competitive Balance*: exclusive home broadcast territories reduce disparities in the quality of teams and thereby promote fan interest by generating more central revenue that is shared equally among all teams.¹⁷⁴ (5) *Franchise Stability*: exclusive home territories and the centralization of the sale of national rights increase the financial stability of teams in smaller markets.¹⁷⁵

Although a complete analysis of these issues must await a review of this evidence, based on the information that is available now, I do not believe any of these arguments constitute a reasonable business justification for the restrictions on competition in the sale and distribution of broadcast rights that are practiced by MLB and the NHL.

Single Entity

The underlying economic issue pertaining to the claim that a league is a single entity for the purpose of analyzing the competitive effects of its conduct is that the divisions of a company

¹⁷¹ *MLB Responses*, pp. 6-10, 15-16, and *NHL Responses*, p. 11.

¹⁷² *MLB Responses*, pp. 13-16, 22, 24-26, and *NHL Responses*, pp. 5-6, 7, 12-14.

¹⁷³ *MLB Responses*, pp. 17-24, and *NHL Responses*, pp. 11-12, 15-16.

¹⁷⁴ *MLB Responses*, p. 15, 20, 25-26, and *NHL Responses*, pp. 14-15.

¹⁷⁵ *NHL Responses*, p. 16.

cannot reasonably be expected to be independent competitors. The divisions of a company share the common goal of advancing the interests of the company of which they are a part. By comparison, the member teams of a league compete in many dimensions, including the acquisition of inputs and the sale of outputs.¹⁷⁶ For example, teams with home stadiums in the same DMA compete locally in all output markets, including ticket sales and telecasts of live games. Teams that have been given home broadcast rights in a DMA in which they are not physically located compete in selling rights to telecast live games in that DMA. Moreover, as discussed elsewhere in this report, teams have sought to have their home broadcast territories expanded so that they could compete with other teams in distant markets, and have sought to obtain the right to stream their live telecasts over the Internet in competition with the league package that is offered over the Internet.

An agreement among horizontal competitors to avoid competition by cooperating in a particular market does not cause these firms to become a single entity. Instead, the appropriate economic framework for evaluating a decision among horizontal competitors to collaborate in a specific market is a standard antitrust examination: did the collaboration cause anticompetitive harm, and if so, did it have a reasonable business justification? When two firms are independent competitors, the single entity argument has no economic content beyond the standard methods for evaluating whether another form of collaboration, such as a merger or a joint venture, is anticompetitive.

¹⁷⁶ As listed in my record of prior involvement in litigation, I am the co-author of an *Amicus* submission to the Supreme Court in its consideration of the American Needle case. This submission expresses my views about why research on the economics of sports supports the conclusion that a professional sports league and its member teams should not be viewed as single entity.

As explained elsewhere in this report, major professional sports leagues in North America perform functions that cannot be performed by a single team, which are to establish common rules of play, standards for the eligibility of players and teams to be permitted to participate, and a season-long schedule of games that produce a credible champion. These functions can be performed by a joint venture of the teams in a league, but such an organizational form is by no means necessary. Regardless of how these core league functions are organized and performed, the existence of such functions does not constitute a business justification for teams to act collusively in selling a final product, such as the sale of television rights.

Efficiencies of Exclusivity

The defendants assert that exclusive home broadcast rights contribute to efficiency in several ways, but at the root of all of these arguments is the correct premise that restrictions on competition among teams for the sale of television rights increase the amount that an RSN is willing to pay for those rights and hence the rewards to a team from the sale of its television rights. To this point the argument is simply that teams and leagues profit from restricting competition, which is not a business justification for these restrictions.

The remainder of the argument hinges on the false premise that a reduction in competition increases investments in building a customer base and hence increases output. As a matter of both economic theory and antitrust policy, this premise is false: the benefits of monopoly derive from the fact that a monopoly firm does not need to spend as much as firms in a competitive industry in convincing customers to buy the firm's product rather than another firm's product. Monopoly leads to less, not more, output and consumer satisfaction.

The first component of the argument of the efficiency of exclusivity pertains to RSNs, which, according to the defendants, may decide not to televise the games of a local team if telecasts of other teams are available in the local markets. The *MLB Responses* (p. 13) state: “Most fans like to watch a home team and it is good for fans in a local area to have their teams televised locally.” The special interest in local teams explains why the games of local teams will be the first to be televised. The MVPD carriage data in DMAs that are the shared home territories of multiple teams show that MVPDs are willing to carry the live game telecasts of more than the one or two teams that are assigned to most DMAs, and do not support the idea that teams from smaller markets will not be televised if more alternatives are made available.

Examples of sports that have absolutely no territorial broadcast exclusivity are Division I college basketball and Football Bowl Division college football. In both sports many conferences compete for carriage on RSNs and national networks, and many games in both sports are available simultaneously on Saturdays from several channels in a local DMA, and many more games are available on other days of the week. The absence of territorial exclusivity in broadcasting rights among either colleges or conferences has not caused RSNs to stop televising games of local colleges in these divisions. The claim that the absence of exclusivity causes fewer games to be telecast because RSNs are uninterested in televising games unless they have exclusive local rights in that sport is inconsistent with the plethora of telecasts of college basketball and football games.

The second component of the efficiencies argument is that exclusivity gives a team a greater incentive to build its fan base in the local market. This assertion has no basis in economics, either theoretically or empirically. Economic analysis has developed an argument about the conditions under which exclusive dealerships and retail price maintenance can increase

investments in customer service and the creation of brand-name identification, but this analysis is in the context of a market in which brands compete for customers in the same product and geographic market.

Although both MLB and the NHL assert that they compete in a broad market for sports and entertainment, the analysis elsewhere in this report concludes that each sport is a separate relevant market, in which case exclusive territorial rights within a sport reduce the number of brands that compete locally. The analysis about the potential benefits of exclusive dealerships and retail price maintenance do not apply if the restrictions also reduce or eliminate brand-name competition within the market. The challenged conduct here is *not* whether a team can grant exclusive rights to televise its games to a single RSN, which is the analogous circumstance to the conditions analyzed in the economics literature on exclusivity, but whether horizontal competitors can agree to divide the country into distinct exclusive markets in which they otherwise would compete.

The third component of the argument that exclusivity enhances efficiency is that it creates an incentive for an RSN to invest in building the popularity of a team for which it holds the rights. To the extent that this argument is valid, it pertains only to exclusivity in the rights to televise games of a specific team. Exclusivity in the sense that no other RSN is permitted to compete by televising the games of another team reduces to zero the incentive of an excluded team's RSN to build brand loyalty for the team for which it televises games. Moreover, the absence of competition from another team on another RSN reduces, not increases, the incentive of the RSN with television rights to the local team to invest in building the brand-name loyalty of that team because the RSN's customers in the local area have no close substitutes for the games that the RSN televises.

The last component of the argument that exclusivity enhances efficiency is that without territorial exclusivity teams would “free ride” on the investments of the league and others in developing the market for the entire sport. Free-riding as the term is used in economics applies to the acquisition of a public good – a product that simultaneously provides benefits to all, regardless of who pays for it. The concept has been applied in antitrust economics to the incentive of a member of a collusive cartel to “cheat” on the collusive agreement not to compete.¹⁷⁷ In this context the agreement by a team not to compete provides broad benefits to all members of the cartel, creating the incentive for one cartel member to “free-ride” on firms that adhere to the price-fixing agreement. Free-riding becomes a relevant economic issue only when a public good that benefits consumers is under-produced because collectively a group of firms lack a sufficient incentive to provide enough of it.

The claim about free-riding with respect to the sale of television rights is difficult to evaluate because it lacks specificity about the nature and magnitude of the investments by a league or another team that enhance the television rights of another team. I am not aware of any concrete examples of investments by either a league or another team that enhances the value of a team’s television rights in a distant DMA, or any evidence that the promotional spending by one team increases the demand for other teams.

The unstated premise of these arguments about investments in building a sport is that fans attend games to see the league, not to see the teams and players that are playing the game. The attachments of fans to a home team and the differences among teams in attendance and local revenues are inconsistent with the view that the league is responsible for the revenues that are generated by a game or, over the season, by a team.

¹⁷⁷ Robert C. Marshall and Leslie M. Marx, *The Economics of Collusion: Cartels and Bidding Rings*, MIT Press, 2012.

Another unstated premise is that the public good that teams and the league provide cannot otherwise be provided by a cooperative agreement through the league. For example, if teams have insufficient incentive to promote their own games – a proposition that is dubious at best – the league can withhold a portion of centralized revenue, such as the revenue from national television rights, and either engage in promotional expenditures as a league or reimburse teams for spending on promotional activities, as is common among manufacturers as a mechanism for encouraging promotion of their products by retailers. The latter is a more direct as well as less restrictive way to induce promotional spending than the creation of exclusive territorial rights in broadcasting.

Product Creation

Both defendants argue that the allocation of television rights in each league has led to the creation of new national television products, including games involving all teams in the league on national networks that are packaged and sold by the league and the creation of the league packages that bundle the telecasts of the RSNs and over-the-air broadcasters that televise the games of teams in their home broadcast territories. This argument is not based on the actual content of the complaints or the relief sought by plaintiffs. The complaints do not attempt to prevent the leagues from offering the same package that they currently offer. Instead, the complaints challenge the restriction that the RSNs that are included in the package cannot offer the programming on their channel, including live telecasts of games involving the teams that they now carry locally, throughout the nation in competition with the league packages, and that limit the ability of the RSN to offer its game telecasts over the Internet.

Current league practice is to require that RSNs grant to the league the right to uncompensated use of their live telecasts of games by a team in the league. The complaints do not challenge this requirement. Because the profit margin of the league package is so large, the league could lose a very large share of the customers for its league package and still profit from continuing to offer it. Likewise, the complaints do not challenge the practice of leagues in setting aside a time during the week when rights to televise games are sold to a national broadcast network. The continued existence of national telecasts of games in college sports demonstrates that such national packages are financially viable even when the broadcaster does not enjoy exclusive rights to broadcast a particular sport in a particular time period.

The *MLB Responses* (pp. 14-15) also claim that exclusive home broadcast territories enable teams to obtain the right to televise their away games. The standard practice in all sports is for teams to grant reciprocal rights to televise all games involving the same two teams. The premise of the argument is that in the absence of home broadcast rights, a team will not agree to this reciprocal arrangement because it can then obtain the exclusive right to broadcast its home games with a team in the visiting team's home territory. Of course, the failure to reach this reciprocal agreement also would mean that a team would lose the right to broadcast its away games, vitiating the benefits of preventing the visiting team from broadcasting its away games.

Regardless of the merits of this argument about whether teams would reach reciprocal agreements about home and away broadcasts, a less restrictive alternative to the system of exclusive home territories is simply for the league to adopt the rule that a team has the right to telecast its away games.

Competitive Balance

Both MLB and the NHL argue that the existing system of assigning television rights enhances competitive balance, in part by giving a team certainty and added value in the sale of its local rights, and in part by increasing revenues from the sale of national rights that are shared equally among all teams.

Competitive balance is an elusive concept. The origin of the concept is the “uncertainty of outcome” hypothesis, which states that demand for a sport is greater if the outcome is uncertain.¹⁷⁸ Competitive balance refers to the extent to which teams are sufficiently close in quality that outcomes are uncertain. Economists have identified three different versions of the concept: (1) either team has a chance to win a game (short-term or match balance); (2) multiple teams have a chance to win a championship until late in a season (medium-term or season balance); and (3) championships rotate among teams over several seasons (long-term or inter-season balance). In addition, economists have proposed different ways to measure each type.¹⁷⁹ The standard test of the uncertainty of outcome hypothesis, and hence the economic significance of the concept of competitive balance, is an econometric analysis of the demand for a sport in which the goal is to determine how measures of the closeness of competition, using one of these three versions of the concept, affects demand.

Another important concept from sports economics is the “invariance principle,” which states that the distribution of quality among teams does not depend on the degree of competition

¹⁷⁸ The seminal work on this topic is the first scholarly publication in sports economics, Simon Rottenberg, “The Baseball Player’s Labor Market,” *Journal of Political Economy* Vol. 64 (June 1956), pp. 242-58.

¹⁷⁹ For a discussion of the various ways to measure competitive balance, see Brad Humphreys, “Alternative Measures of Competitive Balance in Sports Leagues,” *Journal of Sports Economics* Vol. 3, No. 2 (May 2002), pp. 133-48.

in the market for players.¹⁸⁰ The essence of this idea is that in the long run teams having the potential to generate more revenue from better team quality will have stronger teams as long as there are opportunities for spending money to improve team quality. In professional sports in which competition for players is prohibited, such as major league baseball from 1879 until 1975 when the reserve clause gave a team the exclusive and unilateral right to renew the contracts of players, teams in better markets nonetheless fielded stronger teams by spending more on developing younger players in the minor leagues, buying the contracts of players from weaker teams, and spending more on coaching and training.

Management in baseball and other professional sports expressed strong disagreement with the invariance hypothesis, steadfastly maintaining that restrictions on competition for players were needed to preserve competitive balance. A triumph of sports economists is that research predicted that the introduction of competition in player markets would not cause competitive balance to worsen and then subsequently showed that the introduction of free agency did not reduce, and may have increased, competitive balance in pro sports.¹⁸¹

For competitive balance to be a business justification for restrictions on competition in the sale of television rights by teams, two empirical claims must be true. First is the validity of the uncertainty of outcome hypothesis: the financial success of a team and a league requires competitive balance. Second is the invalidity of the invariance hypothesis: without restrictions,

¹⁸⁰ This idea also was first proposed in Rottenberg, *op. cit.*

¹⁸¹ Roger G. Noll, "Professional Basketball: Economic and Business Perspectives." In *The Business of Professional Sports*, Paul D. Staudohar and James A. Mangan, eds. University of Illinois Press, 1991; Ira Horowitz, "The Increasing Competitive Balance in Major League Baseball," *Review of Industrial Organization* Vol. 12, No. 3 (June 1997), pp. 373-87; and Travis Lee, "Competitive Balance in the National Football League after the 1993 Collective Bargaining Agreement," Vol. 11, No. 1 (February 2010), pp. 77-88.

disparity in team quality would increase to the point that demand and revenues would fall significantly.

Economic research provides no reason to believe that restrictions in competition for television rights contribute to competitive balance, no matter how balance is defined, and some reason to believe that these restrictions actually make competitive balance worse. As a theoretical matter, the definition of a team's territorial broadcast rights affects the distribution of team quality only if it alters the relative incentives of teams to improve team quality. The fundamental reason that sports leagues do not exhibit competitive balance is that teams are assigned to local markets that differ in the incremental revenues that a team can earn by improving team quality. That is, teams in the biggest cities – New York, Los Angeles, Chicago – receive a greater financial payoff from fielding a strong team than teams in smaller markets. The assignment of territorial broadcast rights exacerbates this problem by insulating their local broadcast markets from competition, just as exclusive territorial rights for stadium locations insulate a team from competition for game attendance.

In practice, because home broadcast rights are determined in part from the histories of the expansion of RSNs before leagues began to regulate them, the older teams in larger markets tend to have the biggest, most lucrative broadcast territories. For example, the New York Yankees not only have the rights to the largest DMA in the nation, but to the rest of one of the largest states plus parts of other populous states in the northeast. Thus, in this case the boundaries of territorial broadcast rights increase the disparities in the financial returns to team quality in favor of the Yankees. By comparison, a team in a smaller market, such as the Kansas City Royals, has more to gain from the right to televise games into New York State than the Yankees have to gain by televising games into the Royals' less populous home broadcast territory.

The second premise of MLB's assertion is that revenue sharing improves competitive balance. Again, this claim is not supported by economics research.¹⁸² Revenue sharing reduces the increase in team revenue arising from an increase in team quality for every team in the league, with the reduction in revenue equal to the proportion of revenue that is shared. Hence, revenue sharing does not change the relative incentives of teams to improve quality. The principal effect of revenue sharing is to reduce the overall demand for quality, which causes a reduction in payments to the inputs to team quality (players and coaches) and an increase in team profits.

Economics research also has identified two adverse effects of revenue sharing.¹⁸³ First, in leagues that engage in some competition for players with other leagues, such as MLB competes with Japanese baseball leagues and the NHL competes with European hockey leagues, revenue sharing reduces the average quality of teams in the league because it blunts the incentive of teams to recruit better players from these leagues. Second, in some plausible circumstances revenue sharing actually makes competitive balance worse. For example, a team may earn more profit by weakening the team and relying on revenue sharing for its revenues, which amounts to "free-riding" on the agreement to share revenues.

Economists have concluded that the revenue sharing procedure that has been in place in MLB since the lock-out of 1994 makes competitive balance worse by creating a higher implicit

¹⁸² For an explanation of why revenue sharing does not improve competitive balance, see James Quirk and Mohammed El Hodiri, "The Economic Theory of a Professional Sports League," in Roger G. Noll (ed.), *Government and the Sports Business*, Brookings, 1974, pp. 33-80.

¹⁸³ Stefan Szymanski and Stefan Kesenne, "Competitive Balance and Gate Revenue Sharing in Team Sports," *Journal of Industrial Economics* Vol. 52, No. 1 (March 2004), pp. 165-77.

tax on team quality among low-revenue teams.¹⁸⁴ Economists also have concluded that the pooled sale of television rights by a league either has no effect on competitive balance or makes matters worse.¹⁸⁵ The only way that revenue sharing can improve competitive balance is if the tax is higher on sources of revenues that are more sensitive to team quality, but in this case revenue sharing also causes a larger reduction in the quality of play in the league.¹⁸⁶ Finally, economists have determined that “pool sharing” (placing shared revenue in a pool that is divided equally among all teams in a league, such as MLB and the NHL practice with respect to national television revenues) is likely to make competitive balance worse.¹⁸⁷

Notwithstanding the fact that revenue sharing does not improve competitive balance, division of the television rights market into exclusive home territories is not reasonably necessary as a means to create greater equality of team revenue. Both leagues already share revenues, including some of the revenue that is from the sale of both national and regional television rights. If the leagues wish to share revenue more equally, simply increasing the share of total revenue that is shared is a much simpler mechanism for achieving this goal that also is

¹⁸⁴ See Roger G. Noll, “The Economics of Baseball Contraction,” *Journal of Sports Economics* Vol. 4, No. 4 (November 2003), pp. 367-88, and Andrew Zimbalist, “Labor Relations in Major League Baseball,” *Journal of Sports Economics* Vol. 4, No. 4 (November 2003), pp. 332-55.

¹⁸⁵ Sonia Falconieri, Josef Sakovics & Frederic Palomino, “Collective Versus Individual Sale of Television Rights in League Sports,” *Journal of the European Economics Association* Vol. 2 (September 2005), pp. 833-962; Stefan Kesenne, “The Impact of Pooling and Sharing Broadcast Rights in Professional Team Sports,” *International Journal of Sport Finance* Vol. 4 (August 2009), pp. 211-18; Thomas Peeters, “Competitive Balance and Broadcasting Rights in European Football,” Faculty of Applied Economics Working Paper, 2009; David Forrest, Rob Simmons & Stefan Szymanski, “Broadcasting, Attendance and the Inefficiency of Cartels,” *Review of Industrial Organization* Vol. 24 (May 2004), pp. 243-265.

¹⁸⁶ Stefan Kesenne, “Revenue Sharing and Competitive Balance in Professional Team Sports,” *Journal of Sports Economics* Vol. 1, No. 1 (February 2000), pp. 56-55

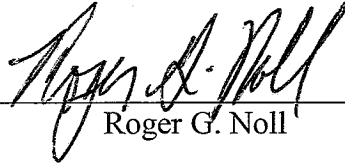
¹⁸⁷ Stefan Kesenne, “Revenue Sharing and Competitive Balance: Does the Invariance Proposition Hold?” *Journal of Sports Economics* Vol. 6, No. 1 (February 2005), pp. 98-106.

much less anticompetitive than dividing the nation into exclusive local broadcasting territories, especially when the economic value of these territories is highly variable and actually advantages the teams in the best DMAs.

Franchise Stability

The NHL states that exclusive home broadcast territories contribute to franchise stability. The explanation given by the NHL is that exclusive territorial rights increase “community commitment” during losing seasons. The argument seems to be that preventing fans from switching loyalties from an unsuccessful franchise by preventing competition from other, more successful franchises is somehow a positive efficiency benefit, when in fact it is another anticompetitive harm. The resulting “commitment” (which actually means a reduction in choices available to consumers) causes a team to lose less revenue and profit if it fields a poor team, which hardly is a benefit to its suffering fans. Undoubtedly preventing a fine chef from opening a restaurant in a city is an excellent way to promote the financial stability of established bad restaurants, but doing so hardly can be termed a benefit to consumers. More generally, consumers do not benefit by being tethered to either bad teams or bad restaurants.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.



Roger G. Noll

Executed at Stanford, California, May 21, 2014.